

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>					
Int. Cl. <sup>7</sup> : H01R 43/00, A61N 1/05					
According to International Patent Classification (IPC) or to both national classification and IPC					
<b>B. FIELDS SEARCHED</b>					
Minimum documentation searched (classification system followed by classification symbols)					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI,IEEE (feedthrough, coat, sacrificial, film, metal)					
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
Y	US 6414835 B1 (WOLF et al.) 2 July 2002 Whole document, especially column 6 lines 47-65, column 8 lines 7-24 Column 10 lines 26-32, 60-65, Figures	31 34,35,36,37, 40			
Y	US 6336269 B1 (ELDRIDGE et al.) 8 January 2002 Abstract, Figure 17C, 19-22, claims	34,35,36,37 40			
Y	ROUSCHE P.J. et al. "Flexible Polyimide-Based Intracortical Electrode Arrays with Bioactive Capability" IEEE Trans. On Biomedical Engineering, Vol. 48, No. 3 March 2001 Figures, Section II Manufacturing Techniques	31,40			
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex					
<p>* Special categories of cited documents:</p> <table style="width: 100%;"> <tr> <td style="width: 33%;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 33%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p> </td> <td style="width: 33%;"></td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>	
<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>				
Date of the actual completion of the international search 23 October 2003		Date of mailing of the international search report 31 OCT 2003			
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  <b>DALE E. SIVER</b> Telephone No.: (02) 6283 2196			

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01288

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2001/0039374 A1 (SCHULMAN) 8 November 2001 Abstract, figures 6B, 7, page 5 sections [0050] to [0053]	35,37
A	US 5833714 A (LOEB) 10 November 1998 Abstract	1
A	ZIAIE, B. et al. "A hermetic glass-silicon micropackage with high-density on-chip feedthroughs for sensors and actuators" Journal of Microelectromechanical Systems September 1996	35,37

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01288

## Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos :  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos :  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

## Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

- 1 Claims 1-30 for a method of forming an electrically conducting feedthrough with steps, characterised by a conductive structure with sacrificial and non-sacrificial components.
  2. Claims 31-33 for a feedthrough formed from a film or shim of an electrically conductive metal or alloy.
  3. Claims 34-50 The characterising portions of independent claims 34, 35, 36,37,40 include a feedthrough with an insulating layer, conductive members with ends and variations to the geometry of the conducting members.
1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
  2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
  4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/01288

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	6414835	US	2002166618		
US	6336269	AU	30737/97	AU	30739/97
		AU	31366/97	AU	41598/96
		AU	41600/96	AU	42376/96
		AU	59397/96	AU	59640/96
		AU	59657/96	AU	60287/96
		AU	66352/96	CN	1135268
		CN	1191500	CN	1197514
		CN	1225724	EP	0729652
		EP	0792463	EP	0792517
		EP	0795200	EP	0828582
		EP	0839321	EP	0839322
		EP	0859686	EP	0886894
		EP	1198001	EP	1232828
		EP	1262782	EP	1321978
		JP	2000067953	JP	2000124397
		JP	2001156223	JP	2002359269
		JP	2003179110	JP	2003218180
		KR	2000011125	US	5476211
		US	5772451	US	5773780
		US	5820014	US	5829128
		US	5852871	US	5864946
		US	5884398	US	5897326
		US	5912046	US	5917707
		US	5974662	US	5983493
		US	5998228	US	5998864
		US	6029344	US	6032356
		US	6049976	US	6064213
		US	6110823	US	6150186
		US	6184053	US	6184587
		US	6242803	US	6246247
		US	6274823	US	6279227
				AU	31277/97
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				CN	1171167
				CN	1208368
				EP	0792462
				EP	0792519
				EP	0837750
				EP	0839323
				EP	0898712
				EP	1241481
				JP	11126800
				JP	2001077250
				JP	2003177144
				JP	2003232809
				US	5601740
				US	5806181
				US	5832601
				US	5878486
				US	5900738
				US	5926951
				US	5994152
				US	6023103
				US	6042712
				US	6090261
				US	6168974
				US	6215670
				US	6252175
				US	6330164

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/01288

US	6442831	US	6476333	US	6483328
US	6525555	US	2001002340	US	2001002341
US	2001002624	US	2001009724	US	2001015652
US	2001020545	US	2001020546	US	2001038030
US	2001054905	US	2002004320	US	2002019152
US	2002023773	US	2002053734	US	2002067181
US	2002080588	US	2002117330	US	2002145032
US	2003038647	US	2003062398	US	2003107394
WO	9514314	WO	9615458	WO	9615459
WO	9615551	WO	9616440	WO	9617378
WO	9637331	WO	9637332	WO	9637333
WO	9637334	WO	9637931	WO	9638858
WO	9716866	WO	9743653	WO	9743654
WO	9743656	WO	9744676		
US	2001039374	AU	36648/99	AU	93145/98
		EP	1040848	US	5999848
		US	6498043	US	2003078484
		WO	9965388	WO	02102267
US	5833714	US	5957958	EP	1030715
				US	6259937
				WO	9912607
END OF ANNEX					